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Dehydration

Assessment

The following systems and characteristics should be monitored in order to recognize possible dehydration:

Circulatory

- Fast heart rate
- Low blood pressure
- Decreased urine output
- Dark concentrated urine

Skin

- Dry
- Less elastic
- Sticky mucous in mouth
- Dry lips
- Warm to touch

<u>Neurological</u>

- Dizziness
- Weakness
- Confusion
- · Decreased alertness
- Seizures
- Coma

Gastrointestinal

- Decreased/hyperactive bowel tones
- Distended, firm abdomen

<u>Psychosocial</u>

- Transition can interfere with fluid intake (new staff or person in home)
- Depression

DIVISION OF DEVELOPMENTAL DISABILITIES SERVICES

The Fatal Four: Dehydration

A Major Challenge that Impacts People with Developmental Disabilities

Serving People with Disabilities in Community Settings



What is Dehydration

Dehydration is the loss of needed body water through the process of sweating, evaporation; or simply when the body loses more fluid then is replaced. It occurs when an individual does not drink enough fluids.

Fluids are needed for temperature control, chemical balance and for cells to make energy and get rid of waste products.

In people with developmental disabilities there are several issues that place this population at risk. Common areas of concern include:

- Immobility or physical limitations where individuals cannot access fluids independently.
- Dysphagia or discoordination of swallow mechanisms with refusal of fluids in an attempt to protect

their airway.

- Suppression of thirst mechanism so individuals do not recognize when they are thirsty.
- Speech/communication limitations preventing individuals from effectively requesting something to drink when they are thirsty.
- Medical conditions where fluid loss can potentially cause dehydration if not monitored and treated appropriately, i.e. kidney disease, altered ADH levels, diabetes mellitus, and diabetes insipidus.
- Cerebral palsy or other medical conditions where poor oral control is exhibited and the individual loses body fluid through drooling excessively.
- Medications that affect body fluid balance.
- Marginal fluid intake.

Risk Factors for Dehydration

There are a long list of factors that may put people at risk for dehydration. This list includes vomiting and diarrhea, excessive sweating, fever, undiagnosed or uncontrolled diabetes and the taking of medications, such as those that are used to control blood pressure.

Moreover, dehydration of people with developmental disabilities is exacerbated by some unique challenges.

Causes of dehydration Excessive fluid loss Excessive sweating High fever • Hot climate Cystic fibrosii Inadequate intake Inability to drink Vomiting · Pyloric stenosis Acute tonsillitis Yiral infections · Gastroenteritie Inadequate access Acute diarrhoea Viral gastroenteritie · Bacterial gastroenteritie Shigella E coll Salmonella Campylobacter Antibiotic-Induced · Food poleoning (toxine) · Any acute infection Fluid lose Polyuria Diabetes mellitus, especia · Post sume diabetic ketoacidosie

These risk factors include:

- Needing assistance with drinking
- Food, fluid and saliva falling out of a person's mouth
- Frequently refusing food / fluids

Signs/ Symptoms for Dehydration
There are many warning signs that
are indicative of moderate to severe dehydration. The number and
severity of the symptoms need to
be recognized by care givers in order to head off medical consequences. Signs of dehydration include:

- Dry skin
- Dry cracked lips
- Less elasticity to the skin
- Going to the bathroom less often
- Strong smelling, dark yellow or brown urine
- Fast weight loss
- Refusal to participate in commonly enjoyable activities
- Sleepy and hard to wake up
- Fever
- Reddened or yellowish color to skin

Sunken eyes

Hydration Concerns with Medications
People who take psychotropic
medications may be at higher risk
for dehydration during hot or
sunny weather. Many antipsychotic medications, such as
Thorazine, Haldol and Risperdal
may inhibit the ability to sweat.

In addition, Lithium, a frequent treatment for bipolar disorder or for aggressive behavior may put those who experience dehydration at high risk for Lithium Toxicity, which may be life threatening.

The first signs of Lithium Toxicity are nausea and vomiting, cramping and diarrhea. And the effect on the nervous system involve tremors or shakiness, lethargy, difficulty walking and confusion.

Recommended Dehydration Prevention Strategies

Suggestions for how to prevent and address dehydration are similar between people with developmental disabilities and those in the general population. However, some of the options for prevention and treatment of this condition are further complicated by the challenges of the people for which we care. The following strategies may help to prevent or decrease the effects of dehydration:

- Individuals should be encouraged to drink 8-10 glasses of fluid/day: persons who weigh more must drink more; persons who weigh less need less
- If a person is reluctant to drink fluids, offer foods high in fluid content, such as gelatin, watermelon, puddings, yogurt or ice cream
- Persons who are very active, work hard, have a fever or perspire heavily need more fluids
- Persons who have cardiac or kidney disease may need less fluid
- A person with dysphagia needs a swallowing evaluation by a health care professional
- Implement a dehydration protocol that provide caregiver training that includes a) having clear instructions regarding fluid requirements, b) listing acceptable minimal amount of fluid intake/day, c) consider the need for monitoring of intake and output, d) list of signs and symptoms or dehydration, and e) knowing what to do if dehydration is recognized and who to notify.

This Learning Curve is based on information from the following sources: AZ Div. of Dev. Dis., Manuel Companion Guide-Protocols and Guidelines 1/08, NH Bureau of Dev. Dis., TX Dept of Aging & Dis. Services, Univ. of Iowa—Hydration Management, Univ. of Oregon—Nursing Manuel.; Network for Kids with disabilities; WebMD ,SPD 2nd Edition, October 2006